

Title (en)

Method for producing a shaft of a gas turbine engine

Title (de)

Verfahren zur Herstellung einer Welle eines Gasturbinenriebwerks

Title (fr)

Procédé de fabrication d'un arbre de turbine à gaz

Publication

**EP 2730395 A1 20140514 (DE)**

Application

**EP 13192470 A 20131112**

Priority

DE 102012022260 A 20121113

Abstract (en)

The method involves placing structured rods placed onto concave areas of sinusoidal structure of end areas of conical, rod-shaped core, and wrapping the core and the end areas with carbon fiber strips. The rods are removed, and carbon fiber layers are radially pressed into concave zones. Filler rods are placed into the zones. The layers and the end areas are wrapped with the strips inclined at specific degrees. Resin is injected into a resin injection mold, heated and cured. A metallic load-input end piece (29) is inserted into end areas of tubular center part and joined to the part.

Abstract (de)

Die Erfindung bezieht sich auf ein Verfahren zur Herstellung einer Radialwelle eines Gasturbinenriebwerks, welche aus +/- 45° Lagen 24, Null-Lagen 32 und +/- 30° Lagen 25 aus Kohlenstofffaserverbund aufgebaut ist und über sinusoidale Anschlussbereiche mit Lasteinleitendstücken 29 verbunden ist.

IPC 8 full level

**B29C 70/46** (2006.01); **B29C 70/48** (2006.01)

CPC (source: EP US)

**B29C 70/462** (2013.01 - EP US); **B29C 70/48** (2013.01 - EP US); **B29D 23/00** (2013.01 - EP US); **F16C 3/026** (2013.01 - EP US); **B29L 2031/75** (2013.01 - EP US); **B29L 2031/7504** (2013.01 - EP US); **F16C 2360/23** (2013.01 - EP US)

Citation (applicant)

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Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2730395 A1 20140514**; **EP 2730395 B1 20151021**; **EP 2730395 B8 20160302**; DE 102012022260 A1 20140528; US 2014130964 A1 20140515; US 9211684 B2 20151215

DOCDB simple family (application)

**EP 13192470 A 20131112**; DE 102012022260 A 20121113; US 201314076847 A 20131111